

# PATENT COOPERATION TREATY

**PCT** Rec'd PCT/PTO 20 JUL 2004

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

REC'D 15 APR 2004

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| Applicant's or agent's file reference<br>XA 1604   | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416) |  |
| International application No.<br>PCT/GB 03/00258   | International filing date (day/month/year)<br>24.01.2003   | Priority date (day/month/year)<br>01.02.2002 |
| International Patent Classification (IPC) or both national classification and IPC<br>F21V15/06 |  |  |
| Applicant<br>BAE SYSTEMS PLC et al.  |  |  |

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of 1 sheets.

- This report contains indications relating to the following items:
  - I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

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|---|--|
| Date of submission of the demand<br><br>14.08.2003  | Date of completion of this report<br><br>15.04.2004  |
| Name and mailing address of the international preliminary examining authority:<br><br> European Patent Office - P.B. 5818 Patentlaan 2<br>NL-2280 HV Rijswijk - Pays Bas<br>Tel. +31 70 340 - 2040 Tx: 31 651 epo nl<br>Fax: +31 70 340 - 3016 | Authorized Officer<br><br>Estrela y Calpe, J<br><br>Telephone No. +31 70 340-2689<br><br> |

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/00258**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-5 as originally filed

**Claims, Numbers**

1-9 received on 02.02.2004 with letter of 27.01.2004

**Drawings, Sheets**

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
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International application No. **PCT/GB 03/00258**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

|                               |             |        |
|-------------------------------|-------------|--------|
| Novelty (N)                   | Yes: Claims | 8      |
|                               | No: Claims  | 1-7, 9 |
| Inventive step (IS)           | Yes: Claims |        |
|                               | No: Claims  | 1-9    |
| Industrial applicability (IA) | Yes: Claims | 1-9    |
|                               | No: Claims  |        |

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The following documents are referred to in this communication:

D1: US-A-3 255 342 (SEITZ ERNST O ET AL) 7 June 1966 (1966-06-07)

D2: US-A-4 495 549 (CARLSON ALBERT A ET AL) 22 January 1985 (1985-01-22)

2. The present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of **independent claims 1 and 9** is not new in the sense of Article 33 (2) PCT.

2.1. Claim 1: Document D1 (see fig. 2) shows a light cover (18) arranged to be placed over a light source (3) , the light source (3) further emitting infrared radiation when in use, wherein the light cover (18) includes a reflective element (20) arranged to reflect a portion of said emitted infrared radiation away from said light cover (18). Document D1 also suggests, at least implicitly, that the emitted infrared radiation is also reflected substantially away from said light source.

2.2. Claim 9: Document D1 discloses (see fig. 2) a light assembly comprising a light source (2) mounted within a housing(1), the light source (2) emitting infrared radiation when in use, a light cover (18) placed over said light source (2) and a reflective element (20) located between said light source (2) and said light cover (18) and arranged to reflect a portion of the emitted infrared radiation away from the light cover (18) and substantially away from said light source (3).

2.3. All features of independent claims 1 and 9 are therefore known from D1.

3. **Dependent claims 2-7** do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty.

3.1. Claim 2: D1 (see column 4, lines 68-73) shows that the reflective element (20) comprises an infrared reject filter (16).

- 3.2. Claim 3: D1 suggests that said reflective element is partially mirrored.
- 3.3. Claims 4-6 : Document D1 (see column 5, line 20) discloses a light cover (18) manufactured from a synthetic material, including a Polycarbonate such as Plexiglas <sup>TM</sup>. The feature of this cover being coated with a scratch resistant layer is considered an obvious measure generally known to the person skilled in the art.
- 3.4. Claim 7: (see also paragraphs 2.1 and 2.2 above). Document D1 also shows that the reflective element (20) is further arranged to reflect said infrared radiation away from said light source (2).

All the features of dependent claims 2-7 are therefor also known from D1.

4. Dependent **claim 8** cannot be readily understood (contrary to Article 6 PCT), since it is unclear how a light cover can comprise another light cover, i.e.: an aircraft exterior light cover.

In any case, if the intention of the above mentioned claim is claiming the use of the light cover of claim 1 in an aircraft exterior light, such subject matter apparently would not involve an inventive step since it would seem to be obvious in the light of the teachings of D1 and D2 and general common knowledge.

Effectively, D2 (see fig. 3) shows a light cover (10) for an aircraft exterior light arranged to be placed over a light source (14) , the light source (14) further emitting infrared radiation when in use, wherein the light cover (10) includes a filter element (44) arranged to absorb said emitted infrared radiation.

It would be therefore obvious for the man skilled in the art to apply the light cover as disclosed in claim 1 in an aircraft exterior light cover.

The subject matter of claim 8 lacks therefore an inventive step.

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EPO - DG 1

CLAIMS

02.02.2004

(100)

1. A light cover arranged to be placed over a light source, the light source further emitting infrared radiation when in use, wherein the light cover includes a  
5 reflective element arranged to reflect a portion of said emitted infrared radiation away from said light cover and substantially away from said light source.
2. A light cover according to claim 1, wherein said reflective element comprises an infrared reject filter.
3. A light cover according to claim 1 or 2, wherein said reflective element is  
10 partially mirrored.
4. A light cover according to any preceding claim wherein said light cover is manufactured from a synthetic material.
5. A light cover according to claim 4, wherein said synthetic material is polycarbonate.
- 15 6. A light cover according to claim 4 or 5, wherein said light cover is coated with a scratch resistant layer.
7. A light cover according to any preceding claim, wherein said reflective element is further arranged to reflect said infrared radiation away from said light source.
- 20 8. A light cover according to any preceding claim, wherein said light cover comprises an aircraft exterior light cover.
9. A light assembly comprising a light source mounted within a housing, the light source emitting infrared radiation when in use, a light cover placed over said light source and a reflective element located between said light source and  
25 said light cover and arranged to reflect a portion of the emitted infrared radiation away from the light cover and substantially away from said light source.